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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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STAAS & HALSEY LLP
SUITE 700
1201 NEW YORK AVENUE, N.W.
WASHINGTON, DC 20005

EXAMINER	
PERUNGAVOOR, VENKATANARAY	
ART UNIT	PAPER NUMBER
2432	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/629,853	KOHIYAMA ET AL.	
	Examiner	Art Unit	
	VENKATANARAYANAN PERUNGAVOOR	2432	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *15 September 2010*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-4,6-24 and 26-41* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-4,6-24 and 26-41* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

Response to Arguments

Applicant's arguments filed 9/15/2010 have been fully considered but they are not persuasive.

The Applicant argues that the office has failed to show teaching in Ebrahim that discloses a tamper-resistant structure inaccessible from outside and falsification checking unit that reads software without operating system through direct access. And reading the information related to software stored in hardware is also not disclosed by Ebrahim.

Ebrahim discloses direct memory access see Col 6 Ln 37-51, and inaccesibe from outside from corruption and improper access see Col 6 Ln 29-36. The protection check logic is used for different access control functions see Col 11 Ln 45-52. The protection check logic is used read and write in table about software residing in memory see Col 12 Ln 20-55 The protected domains containing addresses to restricted spaces, i.e. application related info see Col 12 Ln 3-19. And a process related to the application is matched with entry in table see Col 10 Ln 35-47 before execution, i.e. falsification checked.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-4, 6-24, and 26-41 are rejected under 35 U.S.C. 102(b) as being anticipated by US Patent 5987557 to Ebrahim.

Regarding Claim 1, Ebrahim discloses a hardware secure module having a tamper resistant module structure inaccessible from outside that stores and storing information related to secure software see Fig. 1 item 112;

a memory that stores the secure software see Fig. 1 item 104;

a falsification checking unit that is loaded on the hardware secure module, wherein the falsification checking unit reads the secure software from the memory by direct access without using an operating system, compares the read secure software with the information related to the secure software in the hardware secure module, and checks whether the secure software is falsified based on a result of the comparison see Col 3 Ln 29-45 & Col 6 Ln 37-51; and

a processor that executes the secure software when a result of the check by the falsification checking unit is that the secure software is not falsified see Col 7 Ln 2-16.

Regarding Claim 2-4, 6, 22-24, 26, Ebrahim discloses the second information being read in parts from each hard drive and non-volatile memory and further of comparing of the information see Fig. 2 item 104 & 110, 108.

Regarding Claim 7-12, 27-32, Ebrahim disclose the storing and updating of softwares see Col 8 Ln 6-29.

Regarding Claim 19, 39, Ebrahim discloses the MPEG configuration see Col 12 Ln 42-55.

Regarding Claim 20, Ebrahim discloses an information reproducing method using an operating system comprising:

reading secure software stored in a memory using direct access method without using an operating system, by a hardware secure module having a tamper resistant module structure inaccessible from outside which stores information related to the secure software see Col 3 Ln 29-45

checking falsification by comparing the secure software read at the reading with the information, related to the secure software stored in the hardware module, and determining whether the secure software is falsified based on a result of the comparison Col 7 Ln 2-16 & Col 6 Ln 37-51 and

executing the secure software when a result of determining is that the secure software is not falsified see Col 7 Ln 2-16.

Regarding Claim 21, Ebhrahim discloses a hardware secure module mounted to an information reproducing apparatus and having a tamper resistant module structure, comprising:

a reading unit that reads a secure software from a memory mounted to the information reproducing apparatus by direct access without using an operating system see Col 3 Ln 29-45;

and a falsification checking unit that compares the secure software read at the reading with information related to the secure software stored in the hardware secure module, and checks a falsification of the secure software based on a result of the comparison, wherein the hardware secure module has a tamper resistant module structure inaccessible from outside and when he result of the comparison shows that the secure software is not falsified the secure software is executed by the information reproducing apparatus see Col 7 Ln 2-16 & Col 6 Ln 37-51.

Regarding Claim 40-41, Ebhrahim discloses the reading secure software stored in a memory using a direct access method and without using an operating system, by the hardware secure module having a tamper resistant module structure inaccessible from outside that stores storing information related to the secure software see Fig. 1 & 2;

checking falsification by comparing the secure software read at the reading ith the first information related to the secure software stored in the hardware secure module, and

determining a falsification of the secure software based on a result of the comparison see Col 3 Ln 29-45 & Col 6 Ln 37-51; and

executing the secure software when the result of the comparison is that the secure software is not falsified see Col 7 Ln 2-16.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 13-18, 33-38 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent 5987557 to Ebrahim as applied to claims 1, 21 above, and further in view of US Patent 5022077 to Bealkowski et al.(Bealkowski).

Regarding Claim 13-18, 33-38, Ebrahim does not disclose the keys and encrypting of data. However, Bealkowski disclose the keys and secret information being used to store and encrypt the data see Col 12 Ln 36-48. It would be obvious to one having ordinary skill in the art at the time of the invention to include the keys and secret information being encrypted in the invention of Ebrahim in order to allow authorized system to boot-up BIOS image as taught in Bealkowski see Col Ln 30-56.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to VENKATANARAYANAN PERUNGAVOOR whose telephone number is (571)272-7213. The examiner can normally be reached on 8:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gilberto Barron can be reached on 571-272-3799. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/V. P./
Examiner, Art Unit 2432
November 18, 2010

/Minh Dinh/
Primary Examiner, Art Unit 2432